

REMARKS/ARGUMENTS

A Request for Continued Examination (RCE) is being filed concurrently herewith. Claims 23-33, 125-129 and 132-142 are present in this application. By this Preliminary Amendment, claims 23, 128, 129, 132 and 133 have been amended, claims 130 and 131 have been canceled, and claims 136-142 have been added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

At the outset, Applicants extend their appreciation to Examiners Odland and Patel for their courtesy in conducting the personal interview with Applicants' representatives on July 9, 2004. The contents of the interview are summarized in the following remarks.

With reference to the March 17, 2004 Office Action, claim 132 was rejected under 35 U.S.C. §112, second paragraph. As discussed during the interview, claim 132 has been amended for clarity to better satisfy the requirements of 35 U.S.C. §112, second paragraph.* Claim 133 has been amended for consistency. Support for the term "elastic" can be found throughout the specification - see, for example, page 10, line 19 - page 11, line 5; page 12, line 21 - page 13, line 4. Withdrawal of the rejection is requested.

Claims 23-28 and 125-135 were rejected under 35 U.S.C. §102(b)/103(a) over U.S. Patent No. 5,074,296 to Venegas. This rejection is respectfully traversed.

During the interview, Applicants representatives discussed distinctions between the claims and the cited Venegas patent. In addition to those distinctions discussed in the

* In claim 132 as well as all other claims in which this language appears, use of the phrase "at least one of A and B" is intended to encompass (1) A individually, (2) B individually, or (3) A and B together. The amendments have been made at the Examiner's request.

Amendment filed December 23, 2003, Applicants' representatives explained that in contrast with the Venegas apparatus, the seal between the mask and the user's face is maintained over an operating pressure range of the mask, including a minimum pressure of the operating pressure range, without adjusting the headgear strap. Examiners Odland and Patel understood and agreed with this distinction and further agreed that if language to that effect were added to the claims, such claims would be allowable over Venegas.

Independent claims 23, 128 and 129 have been accordingly amended. Support for this subject matter can be found in the specification at, for example, page 15, lines 6-21. In view of these amendments, as agreed during the interview, Applicants respectfully submit that at least claims 23, 128 and 129 are allowable over the art of record.

With regard to independent claim 127, claim 127 recites that the components of the mask system are constructed such that the force F_c is maintained to at least equal a minimum sealing force for the seal between the user and the mask at a minimum operating pressure of the mask. As discussed in detail in the Amendment filed December 23, 2003, Venegas rather describes operating a ventilator in the expiratory phase of patient breathing where during the lower or non-positive pressure portions of the ventilatory cycle, the seal is eliminated. This structural capability is expressly required in the Venegas respirator mask since its express purpose is to effect intermittent positive pressure breathing treatments, thereby requiring intermittent sealing between the user's face and the mask. The Office Action's conclusion that Venegas describes a structural equivalent is in fact in direct contrast with the express teachings described therein.

Applicants thus respectfully submit that claim 127 is also allowable over the Venegas patent.

Claim 132 defines a gusset portion between the mask frame and the cushion and including a sidewall having at least one of (1) a pressure-dependent projected area, and (2) an elastic portion with a pressure-dependent and/or distance-dependent spring constant such that the force (transferred to the user's face) and the distance (between the cushion and the mask frame) are approximately inversely proportional at a given operating pressure. As discussed during the interview, the alleged "gusset portion" in Venegas lacks any such side wall. Rather, as discussed, the "projected area" in Venegas is constant regardless of a pressure within the piston assembly 14 at least by virtue of the rigid contact between the piston assembly 14 and sidewall 28 as shown in Figure 4. During the interview, Examiner Odland suggested that in a possible operating mode of the Venegas structure, the piston assembly 14 could extend beyond an outermost portion of the sidewalls 28, but Examiner Odland appreciated that such a possibility would be outside of an operating pressure range of the mask system. In this context, claim 132 has been amended to recite that the pressure-dependent projected area is variable over an operating pressure range. Exemplary operating pressure ranges are shown in Figs. 2 and 3. See also, page 15, lines 6-21. Since at least this subject matter is lacking in Venegas, Applicants submit that the rejection is misplaced.

With regard to the pressure-dependent and/or distance-dependent spring constant, Venegas in contrast describes that its piston assembly 14 "is a low friction or frictionless

diaphragm.” See, for example, column 3, lines 21-33. The frictionless nature of the piston assembly 14 in Venegas is in fact important so that it will function in its intended manner. The claimed subject matter is thus also lacking in Venegas, and Applicants respectfully submit that claim 132 is also allowable.

Independent claims 134 and 135 were discussed during the personal interview. The Examiners indicated that claims 134 and 135 would be allowable if there was a statement on the record indicating where the specification describes subject matter that is encompassed by the “means-plus-function” recitations. Without conceding that any such requirement exists and without limiting the scope of the claimed invention, Applicants refer the Examiner to the specification at, for example, page 10, line 22 - page 11, line 5; page 11, line 24 - page 13, line 10; page 14, line 9 - page 15, line 21; and others. Applicants thus respectfully submit that claims 134 and 135 are also allowable over the Venegas patent.

With regard to the dependent claims, Applicants submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim. Moreover, a number of the dependent claims were discussed in detail in the Amendment filed December 23, 2003, the comments therein being hereby incorporated by reference.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 136-142 have been added. Applicants submit that no new matter has been added in the new claims.

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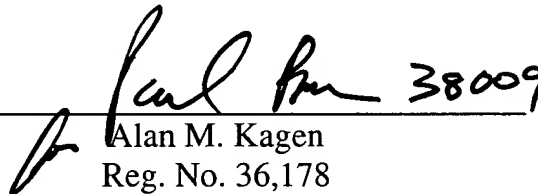
In view of the foregoing amendments and remarks, Applicants respectfully submit that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

Respectfully submitted,

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